DHS Science and Technology Directorate Apex Air Entry and Exit Re-Engineering

Apex AEER's Purpose

The Customs and Border Protection (CBP) Office of Field Operations (OFO) is responsible for enforcing U.S. immigration and customs laws, while facilitating international trade and travel beneficial to the U.S.'s economy. In recent years, increases in international travel have strained CBP resources, resulting in longer wait times and delays for passengers to clear some Federal Inspection Service areas. In addition, DHS is required by law to implement a cost-effective biometric exit process, and is currently working on a solution.

The Apex Air Entry/Exit Re-Engineering (AEER) project was initiated under the leadership of the Department of Homeland Security (DHS) Under Secretary for Science and Technology (S&T) and the Assistant Commissioner of CBP OFO within the Homeland Security Advanced Research Projects Agency to address increasing CBP's capacity to screen travelers entering the United States (U.S.), and to confirm the departure of non-U.S. citizens from U.S. airports. Apex AEER is jointly staffed by S&T and CBP.

Apex programs were developed to allow S&T and a DHS component to collaboratively solve a problem of strategic operational importance. Urgent and fast moving, Apex projects are designed to resolve mission critical issues with high-level support and dedicated staff from S&T and partner organizations.

The Apex AEER project's purpose is to determine how to use new technologies and processes to expedite screening of travelers. Apex AEER will evaluate current commercial biometric technologies to support air entry and emerging exit applications.

Apex AEER has three main objectives:

 To understand the current operations in entry points at airports across different airport environments and configurations. Apex AEER will conduct airport visits to better understand operational processes and identify specific issues. The analysis will include recommendations for introducing or enhancing technologies and/or modifications to existing processes to expedite screening.

- To analyze potential approaches to meet the Congressional mandate for biometric entry and air exit. The challenge is to increase the ability to confirm the identity of persons entering and departing the U.S. while ensuring that processes are efficient and keep pace with growth in international air travel.
- To develop tools that enable CBP to analyze the impacts of changes in traveler screening operations. All air entry/exit analysis, models, technology prototypes, and knowledge products will be transitioned to CBP for use after Apex AEER concludes.

Apex AEER team members work closely with government partners and the private sector to understand the challenges and impacts of current operations and proposed changes on a broad range of stakeholders. They will travel to airports to conduct surveys, to assess operational processes, and to ensure that stakeholders concerns are heard and that appropriate channels exist to capture their feedback.

